



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-1B70/P2
 UNIQUE ID NUMBER: 13GE161
 COMBUSTOR: TAPS
 ENGINE TYPE: TF

BYPASS RATIO: 8.8
 PRESSURE RATIO (π_{00}): 43.9
 RATED THRUST (F_{00}) (kN): 321.6

REGULATORY DATA **** DATA SUPERSEDED ** SEE FOLLOWING UID FOR REVISED DATA: 17GE176**

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.8	20.1	45.5	0.8
AS % OF ORIGINAL LIMIT	4.0	17.0	35.6	4.4
AS % OF CAEP/2 LIMIT (NO _x)			44.5	
AS % OF CAEP/4 LIMIT (NO _x)			48.0	
AS % OF CAEP/6 LIMIT (NO _x)			52.5	
AS % OF CAEP/8 LIMIT (NO _x)			58.4	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 - OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.504	0.02	0.06	34.77	0.0
CLIMB OUT	85	2.2	2.042	0.02	0.17	20.87	0.0
APPROACH	30	4.0	0.654	0.05	1.82	11.02	0.5
IDLE	7	26.0	0.213	0.44	14.78	4.85	0.1
LTO TOTAL FUEL (kg) or EMISSIONS (g)			865	162	5256	12629	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				0.5	16.3	39.3	0.6
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.0	0.0	0.3	0.3
RANGE (D _p /F ₀₀ in g/kN, or SN)				0.47-0.54	16.32-16.36	39.02-39.52	0.35-0.97

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT All POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT All POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	98.1-98.5
TEMPERATURE (K)	295.1-298.8
ABS HUMIDITY (kg/kg)	0.01189-0.01439

FUEL

SPEC	Jet A
H/C	1.89
AROM (%)	15.4

MANUFACTURER: General Electric Company
 TEST ORGANIZATION: General Electric Company
 TEST LOCATION: PTO, Ohio
 TEST DATES: 19/06/2012-21/06/2012

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

REMARKS

1. Ref. GE REPORT R2010AE907
2. Engine S/N 956-101/4
3. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
4. NO_x levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)